[CT] Evolution

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[A] Introduction: The Impassible Dream: Theology, Science and the Evolution of Music

Impassibility stems from the Greek *apatheia*, and is an historical term which describes a wide range of ideas defining God's apparent inability to feel emotion. The Greek Fathers used the word pathos (passion) to describe the suffering of Christ, and so in the early church its opposite, *apathes*, came to mean an incapability to suffer, and by extension the inability to experience emotion of any kind (Culver 1998: 1). In the broadest sense, impassibility conforms to the basic principle of Platonic theodicy and divine simplicity. God is entirely self-sufficient, all-perfect, transcendent, and unchanging in substance, and therefore unable to be affected by anything outside himself (Weinandy 2000: 19). According to the rules of impassibility, since God 'is self-sufficient, he cannot be changed. Since he is perfect, he cannot change himself. Thus suffering and emotion are both incompatible with the nature of a God who never becomes, but *is*.' (Bauckham 1984: 8)

According to most theologians, God remained impassible roughly from the beginning of the church until the early twentieth century, when almost overnight He emerged from the chrysalis of impassibility suddenly – and perhaps not unexpectedly – transformed into a butterfly of passibility. There was a long period of nineteenth-century gestation, however, and in the broadest sense this essay explores how music contributed to that period of evolutionary growth. Music helps us interpret this growth because it provides Victorian evolutionary scientists with a handy – if thorny – theological surrogate for divine passibility: for Darwin, the emotion of love; for Herbert Spencer, the emotion of sympathy. This essay traces the path of their ideas through long-nineteenth-century theology and evolutionary sciences of the emotions. A set of three opening sections covers theology, science and music,

respectively exploring current and nineteenth-century theologies of impassibility; theological tensions over the emotions in the science of design; and the place of emotions in the aesthetic warfare over absolute and programmatic approaches to music. A main section examines music evolution through the seminal influence of Schleiermacher and the music evolutionary theories of Spencer and Darwin, and a conclusion summarizes key points and reflects on the metaphysical nature of Darwin and Spencer's music evolutionary project. Ultimately this essay claims that Darwin and Spencer attempt the impossible: they convert an impassible God into an impassible nature and then try to humanize divine passibility by channelling it into musical emotion. Theirs is the impossible, impassible dream. Like Don Quixote, who argues that dreams are more than dreams, I argue that musical emotion gives Darwin and Spencer more than just music, more than just dreams. It gives them ideas about the evolution of music which try to 'point to the ultimate and deeper reality, the presence of the divine which is in everyone and everything but which is so often obscured from our limited earthly sight.' (Bradley 2004: 103) So if the Man of La Mancha can 'dream the impossible dream' exceeding the impassible dream may not be so elusive after all.

[A] Theology

While theologians generally agree on the currency of impassibility as a principle in the early, medieval and reformation churches current theological opinions differ widely not only on its definition but on its historical evolution as well. Following the lead of Marcel Sarot, Anastasia Philippa Scrutton suggests that impassibility is closer to the concept of invulnerability than it is literally to 'apathy', or being devoid of emotion (2008: 1:19). Rob Lister's assessment is representative of the current lack of consensus. He posits a compromise: 'qualified-impassibility model' to interpret Patristic impassibility as 'a form of divine impassibility with affirmations of divine passion' (2012: 66) – what he calls

impassible and impassioned. Irenaeus, for example, may have suggested that 'the Father of all is at a vast distance from those affections and passions which operate among men' (*Adversus Haereses*, quoted in ibid.: 68), but, according to Lister, he believed God was emotionally expressive. In fact, for Irenaeus divine impassibility and divine emotion (or passion) are paired in a way which does little more than establish boundaries of analogy between divine and human experience (ibid.: 69). Lister is certainly not alone in pairing the paradox of divine impassibility and divine emotion. As Keating and White rightly observe, the classical doctrine of impassibility has been subject to intense criticism in modern theology, much of it unable to reconcile an impassible God of the Bible with the God who suffers in Christ (Keating and White 2009: 1). Even conservative theology struggles to reassert traditional forms of impassibility. Rather than asking whether God suffers like humans, traditional impassibilists are forced to ask whether God must be free from suffering and evil in order to save us; more specifically 'does the identity of Christ assure a presence of God in the world that is capable of transcending the "inevitability of suffering"?' (Ibid.: 3) Jürgen Moltmann provides some logic: 'Were God incapable of suffering in any respect, and therefore in an absolute sense, then he would be incapable of love.' ([1972] 1974: 230) For Moltmann and a host of other theologians, God is not simply passible, he also 'lays himself open to the suffering which love for another brings him; and yet, by virtue of his love, he remains master of the pain that love causes him to suffer.' (Moltmann, quoted in Bauckham 1990: 106)

The progression from impassibility to passibility, from emotionlessness to emotionfulness, suggests an occasionally bumpy evolutionary process which collectively reinterprets the theology of emotions. Like Aaron Ben Ze'ev, Scrutton claims that emotions have no clear and definite borders (2008: 2:85; see Ben Ze'ev 1987: 393); like Amëlie Rorty, that 'The history of discussion of the passions does not form a smooth continuous history,

which expands or narrows the class of pathe by following a single line of thought.' (Ibid.: 2:85; see Rorty 1984: 545) Characteristically and perhaps predictably, most theologians tend to treat passibility as a largely modern, twentieth-century invention: 'Sometime in the modern era', Lister opines, 'the broad consensus on divine impassibility experienced a significant shift.' (2012: 124) Recent studies reflect this bias, generally bypassing the period from the end of the seventeenth century to the beginning of the twentieth. The intervening period is a particular casualty of this narrative, however, and the long nineteenth century a surprising blind spot for such a transitionally significant time in theological history. The long nineteenth-century is important precisely because of its intensely transitional status, marking the progression from the impassibility of antiquity to the passibility of modernity.

Reflecting one of the key impassibilist propositions of *The Westminster Confession of Faith* (1646), William Beveridge (1637-1708) innocently espouses the view that God is

> not subject to nor capable of love, hatred, joy, grief, anger, and the like, as they daily arise in us imperfect creatures; but he is always the same unmovable, unchangeable, impassible God: and therefore in all our contemplations of the Divine essence, we are not to conceive him as one passionately rejoicing or grieving for any thing, as we do, but as a pure and perfect essence, without body, parts, and passions too; as appears from scripture, reason, and fathers. (1847: 26)

But by the nineteenth-century dogmatic affirmations of this kind were manifestly under siege, anticipating Moltmann by over one hundred years (Duncan 1990: 6). According to Charles Hodge (1797-1878), Presbyterian theologian and Principal of the Princeton Theological Seminary,

> If love in God is only a name for that which accounts for the rational universe; if God is love, simply because He develops himself in thinking and conscious beings, then the word has for us no definite meaning; it reveals to us nothing concerning the real nature of God. Here again we have to choose between a mere philosophical speculation and the clear testimony of the Bible, and of our own moral and religious nature. Love of necessity involves feeling and if there be no feeling in God, there can be no love. (1872: 1:428-9)

Hodge continues to register his opposition to impassibility, substantiating his claims with the Bible more specifically:

> We must adhere to the truth in its scriptural form, or we lose it altogether. We must believe that God is love in the sense in which that word comes home to every human heart. The Scriptures do not mock us when they say, 'Like as a father pitieth his children, so the Lord pitieth them that fear Him.' (Ps. ciii:13) He meant what He said when He proclaimed Himself as 'The Lord, the Lord God, merciful and gracious, long-suffering and abundant in goodness and truth.' (Ex. xxxiv:6) ... The word love has the same sense throughout this passage. God is love; and love in Him is, in all that is essential to its nature, what love is in us. (Ibid.: 429)

Hodge is an important theological barometer, as is his successor at Princeton his son A. A. Hodge. Hodge junior takes a more cautious approach. Where his father espoused a God with human-like emotions, A. A. Hodge warns against the freedom of imputing God

with unworthy passions consequently (Duncan 1990: 6). Hodge the younger's prevarication emblemizes a concept in transition. Hodge's contemporary, W. G. T. Shedd, follows his reading of impassibility only to come unstuck over the concept of divine passion: if passion implies passivity, a simple God cannot be moved by stimulus external to his creation. However, while God is 'a most pure spirit without passions ... It is important to remember this signification of the term "passion," and the intention in employing it. Sometimes it has been understood to be synonymous with feeling or emotion, and the erroneous and demoralizing inference has been drawn, that the Divine nature is destitute of feeling altogether.' (1888: 1:170-2) Shedd concludes by shedding (forgive the pun) impassibility: 'While therefore God as a most pure spirit has no passions, he has feelings and emotions. He is not passively wrought upon by the objective universe, so that he experiences physical impressions and organic appetites, as the creature does, but he is self-moved in all his feelings.' (Ibid.: 178) Shedd's compromise, like Lister's, is endemic across a nineteenth-century debunking divine emotionlessness against an increasingly assertive backdrop of romantic humanitarianism. Thomas Thompson epitomizes the transition in theological parallel in the title of his compellingly argued essay, 'Nineteenth-Century Kenotic Christology: The Waxing, Waning, and Weighing of a Quest for a Coherent Orthodoxy'. Citing the 'stampede' to kenotic models of the Incarnation, Thompson delivers a strong message about the deeply conflicted nature of contemporary thought on Christ's humanity. Nineteenth-century kenoticists like Thomasius, Ebrard, Marensen, Gess and Mackintosh run the gamut of full to empty, transcendent to immanent, absolute to relative, immutable to mutable and impassible to passible – from Christ as emphatically 'true deity, true humanity' to a Logos which 'relinquishes all divine attributes, powers, prerogatives, and glory.' (2006, 79, 87) Like its counterpart in impassibility, by the end of the century kenotic theory was

widely deemed to be in tatters as theologians sought ‘to mediate an integrally human Jesus of more modern awareness and sensitivity with the Christ of confessions.’ (Ibid.: 95)

[A] Science

The evolution of passibility did not happen in intellectual isolation. While theology progressed from the philosophical strictures of impassibility to more humanly emollient theories of a God ‘who loves and acts’ (Weinandy 2000: 25) – to theologies obviating ‘God’s compassionate responsiveness to suffering’ (Gavrilyuk 2009: 132) – science wrestled with similar issues in different ways. A principal concern of early nineteenth-century science was the fixed nature of nature, what in the history of evolutionary theory is called the Great Chain of Being. The Great Chain of Being is a scale of nature linking nature, man and (in pre-Enlightenment versions) God in a fixed and immutable hierarchical sequence from the lowest to highest creatures (see Pietsch 2012, Archibald 2014). The God of the Great Chain of Being reflected the immutable character of the sequence itself and by the seventeenth century assumed the absolute position of divine designer (McGrath 2011: 74). By the beginning of the eighteenth century, the image of God had begun to crystallize into a fixed, absolute and rational, if remote, organizational omnipresence at the creationary helm of nature; according to John Ray ‘There is no greater, at least no more palpable and convincing argument of the existence of the Deity, than the admirable art and wisdom that discovers itself in the make and constitution, the order and disposition, the ends and uses of all the parts and members of this stately fabric of Heaven and Earth.’ (1727: 30) The Deity continued designing into the early nineteenth century in William Paley’s famous *Natural Theology* (1802), where God receives a further boost from horology (God is compared to a clock maker; his creation, a clock). Paley’s Newtonian natural theology belies a nascent humanistic approach, however, by appealing to arguments focusing in part on the organizational principles of human

anatomy. The human body has become an integrated element of nature; as Alastair McGrath notes: 'Nature does not merely include stars, trees and rivers: it embraces humanity.'(2006: 1:252) No sooner had Paley introduced humanity into a nature designed by God did theologians extend his evidence into the realm of mind, where correlations between rationalism and a Designing Deity were deemed to be apposite. Steeped in Augustinian thought, Henry Brougham (1778-1868), for example, asks: Ought we not 'to consider the phenomena of the mind as more peculiarly adapted to help this inquiry, as bearing a nearer relation to the Great Intelligence which created and which maintains this system?' (1835: 54)

By the time Brougham arrived at his conclusions on the 'phenomena of the mind', scientific understanding had already absorbed almost a century of changing attitudes towards them. Starting, arguably, with David Hume's work on animal reason and feeling, the previously firm theological line dividing humans and animals began to erode as the immutable nature of divine absolutism and the Great Chain of Being yielded to the more inherently mutable hermeneutics of human relativism. For Hume, in both animals and humans there are original impressions of sensation (bodily pains and pleasures) and secondary or reflective impressions of passion and emotion. Passions subsequently divide into those arising directly from pain and pleasure (such as desire, aversion, grief and joy), and passions arising from pain and pleasure but more complex in cast (such as pride, humility, ambition and vanity). (Spencer 2013: 31) For Hume,

> We may observe, not only that love and hatred are common to the whole sensitive creation, but likewise that their causes ... are of so simple a nature, that they may easily be suppos'd to operate on mere animals. There is no force of reflection or penetration requir'd. Every thing is conducted by

> springs and principles, which are not peculiar to man, or any one species of animals. ([1739] 2003: 282)

Hume's significance is both intrinsic and contextual: firstly he is among the earliest philosophers of mind to put humans and animals on the same emotional footing; and secondly he was read closely by Darwin. While Hume contends that 'reason is but a wonderful and unintelligible instinct in our souls' (ibid.: 128), Darwin claims that 'our necessary notions follow as consequences on habitual or instinctive assent to propositions which are the result of our senses, our experience.' ([1838-9] 2016) Darwin would generalize: 'the mind is [a] function of the body.' (Ibid.) If Hume provided the language of emotion. Darwin's immediate antecedents would provide the increasingly secularized vocabulary – Thomas Brown (1778-1820) perhaps the most significant. Brown made 'the terminological transition from the 'active powers' – appetites, passions, desires and affections – to the emotions (Dixon 2003: 13). It is not without interest that Brown and Brougham were amongst scientists who in 1797 founded the pointedly a-religious Academy of Physics in Edinburgh, organized amongst other things to explore 'The physics of mind, or the philosophy of mind, excluding religious controversies and party politics.' (Welsh 1825: 499) This was, of course, symptomatic of a more general change in attitude towards theology extending Protestant individualism to an even more seemingly self-sufficient proposition. As Dixon so aptly puts it: 'This opposition to Scholastic forms of knowledge ... combined with a passion for religious toleration and inclusivity, led to the construction of an atheological psychology in which authority was given to individual consciousness and mental science rather than religion or theology.' (2003: 117)

Brown may have used terms like 'physiology of the mind', 'mental science', intellectual physics', and 'the physical investigation of the mind', but in fact his work is

strictly philosophical (ibid.: 118); neither is his writing dogmatically Christian. He was a natural theologian in the Broughamian, Paleyian mould and attributed to God nature conventionally providential terms like 'eternal Author of the universe' or 'the one designing Power' (Brown 1828: 277, 434) – precisely the terminology Darwin would later renounce and 'shedd' unceremoniously as divine impassibility was transferred from God to nature, and passibility from the affections to the emotions. Darwin's part in this evolutionary progress was to deny a designing God, drain emotion of its theological authorship and attribute to the expression of emotion the status of a vestigial characteristic. If man was designed purposefully by God, and by their very nature vestigial characteristics lacked purpose, the expression of emotions could not have been designed by God. Darwin's plot to unseat natural theology begins with a refutation of the work of Charles Bell, author of *Expression: Its Anatomy and Philosophy* (1824). Because according to Bell 'the Creator' established relations between the mind and environment he also 'implanted, or caused to be generated in us, various higher intellectual faculties. He has raised in every intelligent being emotions that point to him, affections by which we are drawn to him, and which rest in him as their end ... These feelings cannot be traced to any source, they rise spontaneously, they are universal, and not to be shaken off; furnishing an instance of that adaptation of the mind to its various relations.' (1824: 16) Although Darwin rejected Bell's transcendentalism, he did accept certain features of his research, not least the principle of 'serviceable associated habits'. These are actions (expressions) which became habitually associated with a certain emotional state but later, shorn of their original purpose, continue to produce an expression without any environmental reason. In accepting Bell's point of view, Darwin's response was fairly predictable: habits can become instincts (Richards 1987: 232), and instincts can be expressed through the emotions. There is a potentially interesting twist, however: although, according to natural theology, God designed man perfectly, both Darwin and St Augustine believed that

he was enslaved by the ostensibly useless urges of his physical body – Darwin through inheritance and Augustine through sin. (Dixon 2003: 177) In other words, as anti-religious as Darwin may well have been, there is a kind of trace universalism subsisting within his theory of the emotions (Pampler and Tribe 2015: 169), and, although much contested, it proves that his fundamentally non-cognitive, materialistic approach spoke of a shared immutability at the genetic core of human and animal identity – an immutability recognizable in the relationship between mechanisms of expression and the experience of an emotion, between the impassible process of evolutionary formation and the passible experience of its expression in man.

[A] Music

Music was no bystander to these theological and scientific developments. While theology progressed from impassibility to passibility and science from passion to emotion, music evolved a narrative of its own. In eighteenth and nineteenth-century musical composition, this involved a general, if at times inconsistent, movement from absolute music to programme music – from the fixed, predetermined forms used in the symphony, sonata, concerto and suchlike (absolute music) to forms replicating in music the structural characteristics of extra-musical influences drawn from the arts like poetry, literature or painting (programme music). The term 'absolute music' was coined in 1846 by Wagner who used the opportunity of writing programme notes for Beethoven's ninth (choral) symphony to criticise the idea of purely instrumental music without reference to the world (Bonds 2014: 1-2). Absolute music has a complex pedigree in the language of transcendentalizing immutability. For Carl Dahlhaus, 'If instrumental music had been a "pleasant noise" beneath language to the common-sense estheticians of the eighteenth century, then the romantic metaphysics of art declared it a language *above* language.' (Dahlhaus and Lustig 1989: 9) Contemporary music critic, Eduard Hanslick, describes it in similar terms: 'In music there is

both meaning and logical sequence, but in a *musical* sense; it is a language we speak and understand yet are unable to *translate*' (Hanslick [1854] 1891: 171); moreover,

> the term 'music,' in its true meaning, must exclude compositions in which words are set to music. In vocal or operatic music it is impossible to draw so nice a distinction between the effect of the music, and that of the words, that an exact definition of the share which each has had in the production of the whole becomes practicable. An enquiry into the subject of music must leave out even compositions with inscriptions, or so-called programme music. Its union with poetry, though enhancing the power of music, does not widen its limits. (Ibid.: 45)

The opposite camp – the programmaticist camp – was equally vocal (or 'instrumental' it might be said). One – if not *the* – main exponent of progammaticism was Franz Liszt. Liszt expressed the opposite opinion to concepts of the absolute; for him, music was at its most expressive not when content arbitrarily filled a predetermined form, but when the form and content were co-equally purposeful:

> In program music, the recurrence, variation, alteration, and modulation of motifs are determined by their relationship to a poetic idea. Here one theme no longer begets another ... Though not ignored, all exclusively musical considerations are subordinated to the treatment of the subject at hand. Accordingly, the treatment and subject of this symphonic genre demand an engagement that goes beyond the technical treatment of the musical material. The vague impressions of the soul are elevated to definite impressions through

> an articulated plan, which is taken in by the ear in much the same manner in which a cycle of paintings is taken in by the eye. The artist who favors this kind of artwork enjoys the advantage of being able to connect with a poetic process all those affects which an orchestra can express with such great power. (Liszt, *Berlioz und seine 'Harold-Symphonie'* (1855), quoted in Bond, 2014: 211)

Liszt aims to touch an absolutist nerve: whereas the experience of absolute music produces merely 'vague impressions of the soul', programme music conversely generates estimably 'definite impressions'. The difference between vague and definite impressions is not inconsequential, because it locates Liszt's transitional project in changing theories of musical expression and emotion. Roger Scruton (2016) locates differences between absolute and programme music in features of representation; for Scruton, programme music attempts to depict objects and events, and 'to derive its logic from that attempt. It does not merely echo or imitate things which have an independent reality; the development of programme music is determined by the development of its theme. The music moves in time according to the logic of its subject and not according to autonomous principles of its own.' Accurate as this definition may be at the surface level of representation, it does not, however, describe its deeper ideological intentions to crystallize emotion into something more psychologically identifiable and cathartically beneficial. Liszt is not alone in complaining about the expressive vagaries of absolute music in contrast to the emotional depths of programme music. Music critic and Liszt protégé, Peter Cornelius, astutely summarizes the difference between camps:

> The first [absolutist camp] considers music a fantastical play of tones according the rules of euphony and aesthetic laws derived from the specifically musical works of Haydn, Mozart, and Beethoven ... such as unity in variety, clarity and proportion of forms and means, etc. According to this party, music achieves its effect through itself, without the mediation of accessory ideas; it elevates the soul out of the narrowness of life to ideal heights, rinsing away through its waves of tone, as it were all the rot and triflings of life ... [The second programmaticist camp] is no longer content to arouse vague feelings in the lay person ... It desires instead to take as its material the rich treasures of myth, of the Bible, or history, drawing on the inexhaustible source of one's own heart, the inner circumstances of its love, its passions, its struggles with the world ... It seeks to renounce the freedom of absolute music and its associated servitude to conventional forms in order to win a freedom of form by giving itself over to a specific poetic object. Even if the representation of a specific object runs the risk of remaining imperfect in certain respects ... this camp considers such effort more beneficial than a constant refilling of superseded forms with vague feelings. (Cornielius, 'Review of Richard Würst, *Preis-Sinfonie*, Op. 21' (8 Dec 1854), quoted in Bonds 2014: 215.)

Cornelius and Liszt express what many had felt by the 1850s: the impassibility of absolute music had been superseded by the passibility of programme music, and this is obvious from the way both camps expressed their opinion. Absolute music attracted transcendentalizing language of a semi-religious kind. Hegel writes that music's 'own proper element is the inner life as such, explicitly shapeless feeling which cannot manifest itself in

the outer world and its reality but only through an external medium which quickly vanishes and is cancelled at the very moment of expression. Therefore music's content is constituted by spiritual subjectivity in its immediate subjective inherent unity, the human heart, feeling as such.' ([1823] 1975: 2:626) Dahlhaus sees this as representative of a process of spiritual inwardization, withdrawing from the spatial and material exteriority into a 'prevailing self-awareness of the time, into "feeling",' (Dahlhaus and Lustig 1989: 96) and Hegel himself claims that 'absolute inwardness, is not capable of freely expanding in its independence, so long as it remains within the mould of the bodily shape.' ([1823] 1930: 1:107) Of course, Hegel is also paradoxically responsible for redirecting impassibility into passibility by 'killing' God Christologically. As Robert Williams and others suggest, for Hegel the death of God in Christ also meant the death of death and the consequent death of an impassible, apathetic divinity (Williams 2012: 1; see Caron 2005). Hegel's contribution to the evolution of musical passibility appears to be ignored by musicologists, however, who even in aesthetic contexts tend to focus on historicism and truth-content rather than feeling and emotion (see Hamilton 2007: 72-5, Schnädelback 2010). Yet it is theologians, Keating and White, who hint – perhaps inadvertently – at a musicological methodology when they alight on Hegel's dialectal synthesis: 'This process is simultaneously in some way constitutive of the divine itself. God himself becomes in and through history, a history of dialectic, in an almost musical interplay of thesis, antithesis, and synthesis.' (Keating and White 2009: 8) As an exemplar of programmaticism Liszt's view of Hegel was by no means monochrome; indeed his preface to the *Hungarian Rhapsodies* (1846-53) uses Hegelian dialecticism to ascribe absolute spiritual, if not relative physical, musical nationhood to the Gypsies (Saul 2007: 13), even if he deemed their lives to be 'at once caused and consoled by four elements of sensuality and exaltation: love, song, dance, and drink.' (Liszt [1861] 1926, discussed in Locke 2009: 143) Liszt's changeable attitude towards Hegelian absolutism may reflect the

transitional nature of Hegel's own position on dialectical passibility, but even at his most seemingly abstract – in the *Transcendental Etudes* (1852) for example – Liszt could not restrain himself from giving most of the movements characteristically emotive titles. The progression from impassibility to passibility, passion to emotion, and absolute to programme was under way.

[A] Music Evolution

Nineteenth-century evolutionary theories about music provide an unexpectedly rich meeting place for issues over emotion. Dominated by the two diametrically opposing propositions of Herbert Spencer and Charles Darwin, those propositions are joined by, and rooted in, theories of emotion which not only reveal an essential commonality but also betray their theological and scientific origins. The theological origins of music evolution have an ancient biblical pedigree in the Old Testament, especially in relation to the psalms and their ability to recapitulate the emotional and genealogical experience of both individuals and communities. The psalms bear an essential, if particularly heavy emotional inscription: 'When turned into song, Psalms are grasped with a heightened intensity, the conjunction of word and music linking mind and emotion in an especially potent way.' (Begbie 2007: 107) Begbie speaks for the many when he obviates the emotional content and purpose of the psalms. For some, they are a school of prayer, teaching worshippers how to express their emotions to God (Bracken Long 2014: 546). Calvin himself maintains that 'there is no other book in which we are more perfectly taught the right manner of praising God, or in which we are more powerfully stirred up to the performance of this religious exercise;' (Calvin, *Commentary on the Book of Psalms*, quoted in Long 2014: 557) and for Luther, in psalms message and music combine 'to move the listener's soul.' (Quoted in Leaver 2007: 317) But the emotional content of the psalms – and hymns, perhaps to a lesser extent – reflects more than the singer's

expression of feeling about and towards himself and God. The psalms are experiential time capsules, and embed the individual and shared histories of a people's emotional narrative. Walter Breuggemann claims that the psalms 'with few exceptions, are not the voice of God addressing us. They are rather then voice of our own common humanity, gathered over a long period of time.' (1984: 15) In some way or other, the psalms provide 'genetic' evidence of our shared musical and emotional ancestry; they are theological evidence of the first comprehensive theories of music evolution.

This genetic quality of music, of a type exemplified in the psalms, did not go unnoticed by nineteenth-century theorists of musical evolution for whom religion and science were not so easily separable; for them music not only afforded expression but embodied deeply-felt emotions coordinating historical experience in a spiritual present. If the evolution of music evolved over time, over the course of the nineteenth century it is probably Schleiermacher who, through concepts of feeling, inadvertently gave music evolution its greatest theological impetus. Schleiermacher subscribed to an Aristotelian concept of *poiesis* (production) in which works rooted in man's nature, such as music, also transform his nature: 'Music's anthropological root actually does reach back to the emotions.' (Scholtz 2010: 58) Scholtz touches upon an interesting scientific issue without observing its relationship to proto-evolutionary thinking: music evolves from a matrix of moderated and humanized feelings, creating the unity of a timeless oneness of life; that unity, combined with the need to express mood, stimulates the imagination to generate music out of its inner ear and inner voice; a process of ordering establishes a primal image which then becomes the organizational principle of the work; the work evolves from 'elementary perfection' to a combination of unity and diversity expressing 'organic perfection.' (Ibid.: 58-9) Layered behind this evolutionary process there is another evolutionary process, however, for Schleiermacher claims that the composer's 'greatest triumph, it is true, is when he bids adieu

to language altogether and embodies, in this endlessly changing wealth of tonal sequences and harmonies, all the tremors of life that can pass through the soul.' ([1831-2] 1984: 174) Implicit in Schleiermacher's fundamentally absolutist (and surprisingly impassibilist) perspective is a conception of music as progressively liberated from the emotional restrictions imposed by language. Indeed, music is not only a language *above* languages, it is also an assertion of progressive spiritual unity within the disparate constraints of human ontology. To produce music is to speak (or sing) of individual feelings welling up into mutual collectivity beyond the communicative powers of language, while at the same time collective musical expressions of feelings embody the historical progress of religion. In *Christmas Eve* (1805), Schleiermacher uses story-telling to make his point, voicing the religious *Gefühl* (feeling) through Eduard, one of the story's main protagonists, but the cosy, localized interiority of the narrative belies its more profound implications for the history of religion. *Christmas Eve* is the history of the church in microcosm:

> I feel overflowing with the joy of pure serenity, which I think could withstand anything that might happen to me ... A full consciousness of this mood, however, and an apt appreciation of it, I feel I owe in part to the fact that our little one has invited us to express it in music. For every fine feeling comes completely to the fore only when we have found the right musical expression for it. Not the spoken word, for this can never be anything but indirect – a plastic element, if I may put it that way – but a real, uncluttered tone. And it is precisely to religious feeling that music is most closely related ... What the word has declared, the tones of music must make alive, in harmony conveying it to the whole inner being of its hearers and holding it fast there. ([1806] 1967: 46)

On the surface it would seem as if Schleiermacher's musical evolutionism is entirely self-contained theologically. Religious feeling progresses towards music as it rises above language. But this is to simplify the profound philosophical implications of his evolutionary process for later, more apparently secularly-minded theorists of music evolution for whom emotion lies at the root of being, such as Victorian polymath, public intellectual and caustic verbalist, Herbert Spencer. Where in his *Speeches* Schleiermacher propounds a commonplace teleological evolutionism – religion progresses from (a) chaos to (b) plurality without unity to (c) unity within plurality – Spencer suggests progression from undifferentiated homogeneity to differentiated heterogeneity to differentiated homogeneity (Krech 2010: 72). In parallel, Spencer, like Schleiermacher, also espouses a theory of musical evolutionism which uses feeling to drive language ineluctably towards music. Spencer believes that music is effectively 'impassioned speech' evolving through emotion from speech to music:

> These vocal peculiarities which indicate excited feeling *are those which especially distinguish song from ordinary speech*. Every one of the alterations of voice which have found to be a physiological result of pain or pleasure *is carried to an extreme in vocal music* ... in respect alike of *loudness, timbre, pitch, intervals,* and *rate of variation,* song employs and exaggerates the natural language of the emotions; it arises from a systematic combination of those vocal peculiarities which are physiological effects of acute pleasure and pain. (1951: 57-8)

Like Schleiermacher's history of religion Spencer's musical evolutionism also coordinates teleological trajectory in history. While through emotion music progresses from language to music, through progressive integration it also develops into the differentiated homogeneity of historical narrative, from the undifferentiated homogeneity of simple forms to the differentiated homogeneity of more complex ones:

> In music progressive integration is displayed in numerous ways. The simple cadence embracing but a few notes, which in the chants of savages is monotonously repeated, becomes, among civilized races, a long series of different musical phrases combined into one whole; and so complete is the integration that the melody cannot be broken off in the middle nor shorn of its final note, without giving us a painful sense of incompleteness. When to the air, a bass, a tenor, and an alto are added; and when to the different voice-parts there is joined an accompaniment; we see integration of another order which grows naturally more elaborate. And the process is carried a stage higher when these complex solos, concerted pieces, choruses, and orchestral effects are combined into the vast ensemble of an oratorio or a musical drama. (1867: IXV/§114)

Like Schleiermacher Spencer also postulates an emotional agent of evolutionary propulsion, but where for Schleiermacher that agent reveals Christian religion, in Spencer it exposes man's favourable adaptation of human sympathy. Sympathy, in Spencer's terms, is not unlike Schleiermacher's concept of 'immediate self-consciousness'. This refers to the form self-knowledge assumes when, through the collapse of subjective and objective relationships to God, man becomes cognisant of his individual relationship to the greater whole. (Scholtz

2010: 51) Feelings create that 'timeless oneness of life' which both propitiates and exemplifies meaningful unity. In Spencer's terms, emotions conduce to generate a productive unity of people; music in particular evolves emotions in a process of increasingly integrated differentiation leading ultimately towards human happiness:

> In its bearings upon human happiness, this emotional language which musical culture develops and refines is only second in importance to the language of the intellect; perhaps not even second to it. For these modifications of voice produced by feelings are the means of exciting like feelings in others. Joined with gestures and expressions of face, they give life to the otherwise dead words in which the intellect utters its ideas, and so enable the hearer not only to *understand* the state of mind they accompany, but to *partake* of that state. In short they are the chief media of sympathy. (1951: 73-4)

As a facilitator of sympathy, music would also help lead Spencer to develop a theory of altruism, itself a deeply contested and religiously opaque term (unlike benevolence or charity) (Dixon 2008: 196). Spencer was immutable on the subject of altruism's evolutionary origins in survival – for him, altruistic feelings were all 'sympathetic excitements of egoistic feelings' (1855: 2:612) – and he was equally hostile to religion and certain brands of utilitarianism (Dixon 2008: 200). But then Spencer was ultimately self-conflicted towards the origins of altruism, as he was with the cosmos in general, and dallied unadvisedly with concepts of a transcendental Absolute – what in 'Religion: A Retrospect and Prospect' (1884) he would describe (infelicitously, judging from the harshness of his critics) as 'an Infinite and Eternal Energy, from which all things proceed' (1884: 12). The progression from emotion to sympathy, itself masking a progression from language to music, is not without theological

and metaphysical precedent, therefore; indeed, the role of sympathy in Spencer's musical evolutionism recapitulates the nineteenth-century's transitional uncertainties over the humanizing theologies of impassibility and passibility, the science of passions and emotions, and the advance of programmaticism from the shackles of philosophically tyrannical musical absolutism. That Spencer eventually resorted to mysticism to explain 'the Great Enigma' or the 'Ultimate Reality transcending human thought' (1884: 12) is treated with misgivings by his philosophical contemporaries; nothing suggests that scientifically-minded music critics like John Stainer, C. Hubert H. Parry and Henry Hadow did not share their feelings (Zon 2017). But then the language of Spencer's uncertainties is characteristic of the anxieties of an age uncertain over the spiritual effect changes in evolutionary thought would have on emotion. For Spencer music is the *idealized* language of emotion, so if we take him at his word and there has genuinely 'little by little arisen a wide divergence between this idealized language of emotion [music] and its natural language [speech]' (1951: 69), then perhaps music is more transcendental than he intended to suggest after all, and contradictorily more impassible than passible, more passionate than emotional, more absolute than programmatic. Such are the evolutionary inconsistencies of satirist George S. Carr's 'very apostle of Altruism.' (Carr 1895: 37)

Darwin was arguably less inconsistent in his musical evolutionism, because unlike Spencer he resisted the temptation to transcendentalize emotion into a higher form of sympathy. Instead, for Darwin music reproduces in man emotions once associated with the more rudimentary functions of survival and procreation, rivalry and courtship. As elsewhere in his work on emotion in music evolution, Darwin attributes to the expression of emotion the status of a vestigial characteristic, postulating that 'sensations and ideas excited in us by music, or by the cadences of impassioned oratory, appear from their vagueness, yet depth,

like mental reversions to the emotions and thoughts of a long-past age (1871: 2:336); indeed, music recalls

> in a vague and indefinite manner, those strong emotions which were felt during long-past ages, when, as is probable, our early progenitors courted each other by the aid of vocal tones. And as several of our strongest emotions – grief, great joy, love, and sympathy – lead to the free secretion of tears, it is not surprisingly that music should be apt to cause our eyes to be suffused with tears, especially when we are already softened by the tenderer feelings. (1872: 219)

Amongst these emotions one has survived more than others, however – love, the true emotion of courtship: 'Love', Darwin claims, 'is still the commonest themes of our own songs.' (1872: 2:336) Love is a problematical emotion for Darwin, for, although all emotions are equally atavistic, their function is not equally important to survival; in fact, Darwin appears to tacitly hierarchize love at the top of a Great Chain of Emotional Being by suggesting it has achieved emotion's greatest survival. In the process, he muddles cause and effect when the emotion of love is placed within the construct of larger evolutionary considerations like the development of language. In Darwin's world, music does not really evolve in a teleological, Spencerian way but captures emotions later found as traces embedded in language. Where, therefore, Spencer believes that music evolved from impassioned speech, Darwin propounds the opposite to be true; indeed it could be argued that for Darwin language is innately impassioned by music. Writing in *The Descent of Man*, he suggests that Spencer

> concludes that the cadences used in emotional speech afford the foundation from which music has been developed; whilst I conclude that musical notes and rhythm were first acquired by the male or female progenitors of mankind for the sake of charming the opposite sex. Thus musical tones became firmly associated with some of the strongest passions an animal is capable of feeling, and are consequently used instinctively, or through association, when strong emotions are expressed in speech. Mr. Spencer does not offer any satisfactory explanation, nor can I, why high or deep notes should be expressive, both with man and the lower animals, of certain emotions. (Ibid.: 2:336)

If music is distinguished by its pre-linguistic status, it is also distinguished by its unique capacity to differentiate and promote a range of emotional expressions. Darwin clearly aims to distinguish emotional instincts of love and sympathy from passions of a more rudimentary nature, and uses evolution to repudiate the idea that morality assumes that human nature is invariably and congenitally selfish (Dixon 2008: 132). For him, 'disinterested love for all living creatures, [is] the most noble attribute of man.' (1871: 1:105) In evolutionary terms, music is the perfect carrier of love precisely because it is so congenitally preponderant – even universal: 'The capacity and love for singing or music', Darwin claims, 'though not a sexual character in man, must not here be passed over. Although the sounds emitted by animals of all kinds serve many purposes, a strong case can be made out, that the vocal organs were primarily used and perfect in relation to the propagation of the species.' (Ibid.: 2:330) The universality of music and its capacity to convert sexual passion from the very rudiments of animal propagation into the highest expression of human love reflects an indisputably contemporary scientific model of emotional progressionism, and, as we know, Darwin would struggle to abandon his rather

Lamarckian teleological inclinations despite seeming to overcome his theological beliefs: 'natural selection', he maintains in every edition of the *Origin of Species*, 'works solely be and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection.' (1859: 489) Music is implicated in this process or progress not only because sexual selection operates in conjunction with natural selection, but because it helps man tend toward perfection through the emotion of love. George Levine capitalizes on this confusion more generally when he cheekily paraphrases the ubiquitous evangelical bumper sticker 'Jesus loves you' into the title of *Darwin Loves You* (2006). But as with Darwin there is a theological fly even within Levine's own incontestably scientific ointment: Levine's subtitle is metaphysically recidivistic and curiously Spencerian – *Darwin Loves You: Natural Selection and the Re-enchantment of the World*, and the sacralisation of secularization is irrepressibly present in its aspirational absence. As Levine admits, even Daniel Dennett 'calls this secular world "sacred." Darwinian enchantment entails an attitude of awe and love toward the multiple forms of life.' (2006: 250) Predictably, Levine and Dennett (and many similarly-minded others) aim to fulfil what Darwin himself struggled to do by replacing an impassible God with an impassible Scientist: 'The scientist's tendency to love the world he or she is committed to describe as impartially, with as little affect as possible, is not an aberration at all. It is what happens to any of us when ... we really learn to see something with great clarity, to understand its workings.' (Ibid.: 253)

The impassible God and the impassible Scientist are not as dissimilar as Levine would have us believe, and Darwin's understanding of music helps us to explain that. If Darwin's theory of musical origins revolves around the perfectibility inherent in the emotion of love, then the love of music would itself have an evolutionary purpose. The love of music and the music of love are intimately related, therefore, expressing an interrelationship between cause and effect with origins in the earliest and most primordially genitive attributes of man. And

as man is a relative new-comer to evolutionary history, Darwin looks to simpler forms and expressions in the natural world to identify musical origins. Birdsong is Darwin's evolutionary trump card, at least in theory. Male birds sing to attract a mate, and mates are attracted by the quality of their song. The best song produces the best likelihood of reproduction; i.e., survival of the fittest. But birdsong is not as straight forward as that, however, because it is difficult to extrapolate the passibility of love from the impassibility of sexual selection. At some evolutionary point in history, sex became love, but exactly when did that happen and what did music have to do with it? Nineteenth-century ornithology provides an answer, or at least a plausible explanation. Darwin wrote on *The Descent of Man* and *The Expression of the Emotions in Man and Animals* when, like most science, ornithology was fledging from its theological nest. But the field or ornithology struggled to cut its roots in natural theology, and many aspirationally scientific ornithologists clung unrepentantly to their atavistic theological tendencies. Henry Drummond encapsulates this strand of thinking: 'What goes on then in the animal kingdom is this – the Bird-Life seizes upon the bird-germ and builds it up into a bird, the image of itself ... The visible bird is simply an incarnation of the invisible Bird-Life ... As the Bird-Life builds up a bird, the image of itself, so the Christ-Life-builds up a Christ, the image of Himself, in the inward nature of man.' (1896: 292-3) Drummond's conflation of ornithology and incarnational theology – effectively ornitheology – is commonplace at the time, and although Darwin would sedulously avoid it, he could not overcome the unassailably redemptive lens it focused on man's relationship to man. And that lens is invariably trained on the development of love. The Rev. W. E. Evans invokes the constancy of the woodlark as an example:

> While the other larks congregate in flocks during the Winter, and fly from field to field, this, for the most part, is stationary; or, if joining the others for a

> time, soon separates to return and sing in its accustomed haunts. Type of the Christian with his pure and holy home ... Type, too, of the spirit whose home is with God ... where all its hopes and all its love are centred! (1845: 37)

It can be no surprise, therefore, that when it came to the evolution of music, Darwin struggled to extricate himself from the redemptive ornitheological language of the time, and in fact embraced the music of its form without embracing the language of its content: to paraphrase Levin, enchantment is, after all, en-chant-ment.

[A] Conclusion

Darwin is at his most en-chant-ing when using music evolution to elevate the faceless passion of sexual selection into the intensely human emotion of love, and in this respect he does more than simply impassion music with love. Spencer may consider music to catalyse the emotion of sympathy (which in turn enhances survival), but for Darwin, as Schleiermacher, musical emotion expresses evolutionary commonalities which universalize human history within the totality of natural creation. Compare *Christmas Eve* to the magisterial ending of the *Origin of Species*:

> Only in immediate relation to [that which is] the highest in our lives – to religion, and to some distinct form of it – does music have enough concrete reference, without being tied to some mere contingency, to be intelligible. Christianity is a unique theme presented in endless variations. Yet these variations are

> There is a grandeur in the view of life, with its several powers, having been originally breathed [by the Creator, editions 2 to 6] into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and

conjoined by a single law intrinsic to each, which gives them a distinct character overall. (Schleiermacher [1806] 1969: 104)

most wonderful have been, and are being, evolved. (Darwin 1859: 490)

Despite his vacillation over the existence of a Creator, Darwin never relinquished his transcendental explanation of creation, and neither did his view on music and emotion change substantially over the course of his life. What did change were the ideas revolving around him, as passions and design were gradually replaced by emotions and natural selection in a cultural shift away from theological agency and towards scientific mechanism. Paradoxically, however, Darwin's mechanistic universe produced the very same cosmic impassibility which natural selection sought to humanize. Tortured by the existence of pain and suffering in the world, Darwin sought to reconcile its moral burden by preferring senseless suffering to suffering ostensibly willed or permitted by God (Fleming 1961: 230-1). Like many other theologians, John Haught responds to this acutely Darwinian dilemma by citing the need for a kenotic approach involving a passible, self-emptying God who participates in the suffering of the world – a God 'who suffers along with creation [and affirms] that the agony of living beings is not undergone in isolation from the divine eternity.' (2001: 49-50) In evolutionary terms, Darwin's theory of musical origins encapsulates this conflict. Music, for Darwin, aspires to an emotional condition of love in the same way that for Walter Pater, 'All art constantly aspires to the condition of music.' ([1873] 1986: 86) Unlike Spencer, for whom 'evolution is a process which, in itself, generates value' (Ruse 1995: 231), Pater's evolutionary aspirations begin on an entirely less materialistic basis; indeed, one might even say that the opposite is true. For Pater, evolution is a process of becoming which value generates: 'It is the art of music which most completely realizes this artistic ideal, this perfect identification of matter and form. In its consummate moments, the

end is not distinct from the means, the subject from the expression; they inhere in and completely saturate each other; and to it, therefore, to the condition of its perfect moments, all the arts may be supposed constantly to aspire.' ([1873] 1986: 88) It does this because for Pater 'evolution is neither futuristic nor chiliastic; it is historical. The beginning and end of becoming are of no significance beside the actual process of change.' (Iser [1960] 1987: 77)

Is, therefore, Darwin's theory of musical origins actually a metaphysical (or even theological) theory of becoming rather than a scientific theory of evolution? Alister McGrath provides some help answering this question. According to McGrath (and others), without incarnational theology 'we cannot trace a straight and narrow trajectory, proceeding directly from the present empirical reality that we call "nature" and the ideal that we call "the good,", identifying observations of natural patterns and processes with explicit moral values or norms.' (McGrath 2008; see Rice 2000: 48-63) Darwin – and perhaps even Spencer – sought to do the impossible, and tried to use science to substitute musical emotion for the impassible God they replaced with impassible nature. Theirs was the impassible dream – an attempt to use music to transcend transcendence at the very core of human emotional origins – in a sense, to help us understand and attain what Schleiermacher would call 'immediate self-consciousness', or Pater simply 'music'. Of course, Darwin and Spencer were not alone in exploiting musical emotion to overcome a defiantly impassible absolute. Unlike programmaticists such as Liszt who sought to reflect the nature of life in the structure and content of their compositions, Darwin and (perhaps to a lesser extent) Spencer sought to interpret the nature of life through the structure and content of their human reflections – and they did this without recourse to denominational theology, whether projecting the evolution of music towards love or sympathy. If according to Spencer music is the idealized language of emotion, for Darwin there is nothing idealized about it, or evolution for that matter. According to Darwin, musical emotion is part of creation in its deepest, most remotely human

and animal form, but there it remains, like a soul, within the very material stuff of our genetic make-up. There is no teleological progression towards perfection – only a driving reproductive force uniting our emotions to nature, as Hume would suggest. Musical emotion problematizes the idea of an impassible God by creating passibility even at the heart of impassibility, whether natural or divine, scientific or theological. The very existence of music proclaims the impossibility of impassibility, and music evolution bears witness to its truth. Jürgen Moltmann claims that by virtue of his love God 'remains master of the pain that love causes him to suffer' (Moltmann, quoted in Bauckham 1990: 106), but for Darwin and Spencer this is precisely what music is evolved to do – to express what seems impossible: to dream the impossible dream and sing the impassible song.

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